DETAILED ACTION

This action is response to the application filed on September 29th 2006. Claims 1-18 are

pending.

Specification

The abstract of the disclosure is objected to because the abstract should be in narrative

form and generally limited to a single paragraph on a separate sheet within the range of 50 to 150

words. It is important that the abstract not exceed 150 words in length since the space provided

for the abstract on the computer tape used by the printer is limited. The form and legal

phraseology often used in patent claims, such as "means" and "said," should be avoided.

Correction is required. See MPEP § 608.01(b).

Claim Rejections - 35 USC § 101

35 U.S.C. 101 reads as follows:

Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or
any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and
requirements of this title.

Claim 18 is rejected under 35 U.S.C. 101 because the claimed invention is directed to

non-statutory subject matter. The method claim 18 is not tied to another statutory class (a

particular machine or apparatus) of invention or performs any physical transformation (such as

an article or materials). Therefore the claim invention is not statutory. Appropriate correction is

required.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all

obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in
section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are
such that the subject matter as a whole would have been obvious at the time the invention was made to a person
having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the
manner in which the invention was made.

Claims 1-2, 4, 7, 9, 12-15 are rejected under 35 U.S.C. 103(a) as being unpatentable over

Sumita et al. (Patent No. : US 5649193 A) in the view of Yanagita (Pub. No. : US 20070286567

A1).

As to claim 1 Sumita teaches an information extraction system, comprising:

an input unit that inputs a text (**Fig. 2, 201 and column 7 line 21;** The input unit 201

enters input sentences from the user);

a viewpoint and description extraction rule storage that stores a viewpoint and description

extraction rule for specifying the pairs of a viewpoint and a description for an expression in the

text (**column 9 lines 11-14 , 20-22** discloses viewpoint data and content words (i. e., description)

are extracted according to the extraction rule);

a viewpoint and description extraction unit that extracts the corresponding pairs of the

viewpoint and its description of the expression (**Fig. 3, 303 & fig. 5, 501, 502 & column 9 lines

11-14;** discloses viewpoint data and content words (i. e., description) are extracted) using the

viewpoint and description extraction rules (**column 9 lines 11-14 , 20-22** discloses viewpoint

data and content words (i. e., description) are extracted according to the extraction rule) that

based on syntactic and/or semantic attributes (**column 9 lines 11-14, column 9 line 23-27;** each

view point extraction rule … indicates syntactic pattern to be matched).

Sumita does not explicitly disclose extract the element metadata to which identification

information is added; and

a metadata storage that stores element metadata.

However Yanagita teaches extract the element metadata (**paragraph [0210];** extracts metadata) to which identification information is added (**paragraph [0057];** identification information to be added); and

a metadata storage that stores element metadata (**paragraph [0020];** a metadata storage part for storing metadata).

It would have been obvious at the time the invention was made to a person having ordinary skill in the art to modify Sumita by adding above limitaions as taught by Yanagita and doing so would the system of Sumita allows to enhance the system's usability to identify material, for example, such as the gathering time, a gathering ID, a gathering title, and a reporter name (Yanagita, paragraph [0057]).

As to claim 2 Sumita together with Yanagita teaches an information extraction system according to claim 1. Sumita teaches syntactic attribute includes the character string notation and/or the classification of a part of speech (**column 9 lines 39-46;** syntactic pattern of "with an object of").

As to claim 4 Sumita together with Yanagita teaches an information extraction system according to claim 1. Sumita teaches the viewpoint and description extraction unit (**Fig. 3, 303 & fig. 5, 501, 502**) extracts the corresponding pair of the viewpoint and its description of the expression using the viewpoint and description (**column 9 lines 11-14, 20-22** discloses

viewpoint data and content words (i. e., description) are extracted according to the extraction rule).

Yanagita teaches element metadata to which identification information is added (**paragraph [0057];** metadata can be mentioned as identification information to be added).

As to claim 7 Sumita together with Yanagita teaches an information extraction system according to claim 1. Sumita teaches a comparison unit (**column 31 lines 40-64**; compare two node). So it would have been obvious at the time the invention was made to a person having ordinary skill in the art to compare viewpoint (i. e., node 1) and description of element (i. e. node 2) to determine similarities (i. e. relationship).

Yanagit teaches a metadata integration unit that integrates related element metadata based upon the estimated relevance and outputs integrated metadata (see paragraph [0057] and [0021]).

As to claim 9 Sumita together with Yanagita teaches an information extraction system according to claim 7. Sumita teaches a topical thing estimation unit that estimates a topical thing in element metadata extracted by the viewpoint and description extraction unit using a topical thing estimation rule for estimating a topical thing (**See column 9 lines 51-57**; the noun part are taken out), and stores the topical thing estimated by the topical thing estimated by the topical thing estimation unit (see column 6 line 67; memory 102 store data used by the central processing unit).

Yanagita teaches metadata storage (see paragraph [0021]).

As to claim 12 Sumita together with Yanagita teaches an information extraction system according to claim 1. Sumita teaches the viewpoint and description extraction rule includes a user viewpoint and description extraction rule which is a rule for specifying information on user who creates the text (**column 9 lines 11-14, 20-22** discloses viewpoint data and content words (i. e., description) are extracted according to the extraction rule); and the viewpoint and description extraction unit extracts user information using the user viewpoint and description extraction rule (**column 9 lines 11-14, 20-22;** information are extracted according to extraction rule); and

Yanagita teaches metadata (see paragraph [0021]).

As to claim 13 Sumita together with Yanagita teaches an information extraction system according to claim 1. Sumita teaches the viewpoint and description extraction rule includes a source viewpoint (**see column 9 lines 27-31**) and description extraction rule which is a rule for specifying source information that describes the bibliography of the text (**See column 9 lines 51-57**; the noun part may be interpreted as bibliography text); and viewpoint and description extraction rule (**column 9 lines 11-14 , 20-22**).

Yanagita teaches extract metadata (see paragraph [0210]; extract metadata from input).

As to claim 14 Sumita together with Yanagita teaches an information extraction system according to claim 9. Sumita teaches the comparison unit is further provided with an objectivity/reliability determination unit that determines objectivity and reliability of a viewpoint and an objectivity/reliability determination rule storage that stores an objectivity/reliability

determination rule for determining the objectivity and the reliability of the viewpoint and the

description (**see column 28 lines 15-17;** similarity levels); and

Yanagita teaches metadata (see paragraph [0021]).

As to claim 15 Sumita together with Yanagita teaches an information extraction system

according to claim 9. Sumita teaches when the topical thing estimation unit estimates a topical

thing of element (**See column 9 lines 51-57;** the noun part are taken out); and

Yanagita teaches metadata and metadata storage (see paragraph [0021]). It would have

been obvious at the time the invention was made to a person having ordinary skill in the art to

estimat the topical thing using at least one of metadata as taught by Yanagita.

Claims 3, 5-6, 8, 10-11 are rejected under 35 U.S.C. 103(a) as being unpatentable over

Sumita and Yanagita and further in the view of Nomoto et al. (Publicatoin No. : US

20040049499 A1).

As to claim 3 all of the limitations of claim 1 have addressed above. Sumita and

Yanagita do not explicitly disclose semantic attribute includes semantic classification. However

Nomoto teaches semantic attribute includes semantic classification (**paragraph [0050];** semantic

attribute (meaning classification)). It would have been obvious at the time the invention was

made to a person having ordinary skill in the art to modify Sumita and Yanagita by

adding semantic attribute includes semantic classification as taught by Nomoto and doing so

would the system of Sumita and Yanagita allows to enhance the system's usability to assign a

detailedness of information (Nomoto, paragraph [0050] & [0051]).

As to claim 5 Sumita together with Yanagita and Nomoto teach an information

extraction system according to claim 1. Nomoto teaches an attribute addition unit that adds the

semantic attribute including the semantic classification for character strings in a text using the

semantic attribute addition rules and outputs the text added the semantic attributes (**Fig. 17,**

S6500 & paragraph [0136]; assign semantic attributes).

As to claim 6 Sumita together with Yanagita and Nomoto teach an information

extraction system according to claim 1. Sumita teaches the viewpoint and description extraction

unit (**Fig. 3, 303 & fig. 5, 501, 502**) extracts the corresponding pair of the viewpoint and its

description (**column 9 lines 11-14 , 20-22;** viewpoint data and content words (i. e., description)

are extracted according to the extraction rule).

Nomoto teaches assign semantic attribute (**Fig. 17, S6500 & paragraph [0136]**; assign

semantic attributes). It would have been obvious at the time the invention was made to a person

having ordinary skill in the art to assign semantic attribute when no viewpoint is explicitly

expressed in a text and only the description is expressed.

As to claim 8 Sumita together with Yanagita and Nomoto teach an information

extraction system according to claim 6. Sumita teaches a comparison unit (**column 31 lines 40-**

64; compare two node). So it would have been obvious at the time the invention was made to a

person having ordinary skill in the art to compare viewpoint (i. e., node 1) and description of

element (i. e. node 2) to determine similarities (i. e. relationship).

Yanagita teaches metadata (see paragraph [0021] and [0057]) and

Nomoto teaches semantic attributes (**paragraph [0050];** semantic attribute (meaning

classification)).

As to claim 10 Sumita together with Yanagita and Nomoto teach an information

extraction system according to claim 9. Sumita teaches the topical thing estimation unit estimates

a topical thing of an element based upon a viewpoints, descriptions (**See column 9 lines 51-57**).

Yanagita teaches metadata storage (see paragraph [0021].

Nomoto teaches semantic attributes (**paragraph [0050];** semantic attribute (meaning

classification)).

As to claim 11 Sumita together with Yanagita and Nomoto teach an information

extraction system according to claim 9. Sumita teaches the metadata comparison unit compares

between viewpoints and between descriptions of the same topical thing estimated by the topical

thing estimation unit (**column 31 lines 40-64 and column 9 lines 51-57**).

Claims 16 and 17 are rejected under 35 U.S.C. 103(a) as being unpatentable over Sumita

and Yanagita and further in the view of Lee et al. (Patent No. : US 7031956 B1).

As to claim 16 all of the limitations of claim 14 have been addressed above. Sumita

teaches a display to show the output result to the user (Fig. 2; 207). Sumita and Yanagita do not

explicitly disclose a metadata output format generator that arranges the metadata in a format of a

table and generates a metadata table; and a metadata output unit that shows the generated

metadata table. However Lee teaches a metadata output format generator that arranges the

metadata in a format of a table and generates a metadata table (The extractor can generate an

attribute metadata table corresponding to attribute type content particles in the document-type

definition, **column 8 lines 31-32**); and a metadata output unit that shows the generated metadata

table (The extractor can generate an attribute metadata table, **column 8 line 31**). It would have

been obvious at the time the invention was made to a person having ordinary skill in the art to

modify Sumita and Yanagita by adding above limiations as taught by Lee and doing so would

the system of Sumita and Yanagita allows to enhance the system's usability to arrange the

metadata in a table.

As to claim 17 Sumita together with Yanagita and Lee teach an information extraction

system according to claim 16. Sumita teaches a user request processor that processes a request

(The central processing means 101 is formed by a processor for carrying out various processing

operations, **column 6 lines 65-66**) from a user (enters input sentences from the user, **column 7**

line 21) and matching technique (**see column 3 line 10**; documents which match with the

detection command).

Lee teaches the metadata output format generator generates a metadata table using

metadata (**column 8 lines 31-32**).

Claim 18 is rejected under 35 U.S.C. 103(a) as being unpatentable over Sumita et al.

(Patent No. : US 5649193 A) in the view of Yanagita (Pub. No. : US 20070286567 A1) and

Nomoto et al. (Publicatoin No. : US 20040049499 A1).

As to claim 18 Sumita teaches an information extraction method, comprising:

a step for inputting a text (**Fig. 2, 201 and column 7 line 21;** The input unit 201 enters

input sentences from the user);

a step for referring to a viewpoint and description extraction rule for specifying a pair of a

viewpoint of an expression described in the text and a description of the viewpoint (**column 9**

lines 11-14 , 20-22 discloses viewpoint data and content words (i. e., description) are extracted

according to the extraction rule); and

a step for extracting the pair of the viewpoint and its description (**column 9 lines 11-14,**

20-22 discloses viewpoint data and content words (i. e., description) are extracted according to

the extraction rule) based upon at least one of a syntactic attribute (**column 9 lines 11-14,**

column 9 line 23-27; each view point extraction rule ... indicates syntactic pattern to be

matched).

Sumita does not explicitly disclose metadata relating the pair and a semantic attribute

added to a character string.

However Yanagita teaches a element metadata (**paragraph [0020];** a metadata storage

part for storing metadata).

It would have been obvious at the time the invention was made to a person having ordinary skill in the art to modify Sumita by adding above limitaions as taught by Yanagita and doing so would the system of Sumita allows to enhance the system's usability to identify material, for example, such as the gathering time, a gathering ID, a gathering title, and a reporter name (Yanagita, paragraph [0057]).

Sumita and Yanagita do not explicitly disclose a semantic attribute added to a character string.

However Nomoto teaches a semantic attribute added to a character string (**Fig. 17, S6500,** assign semantic attributes **& paragraph [0111]**; semantic attributes are added). It would have been obvious at the time the invention was made to a person having ordinary skill in the art to modify Sumita and Yanagita by adding above limitations as taught by Nomoto and doing so would the system of Sumita and Yanagita allows to enhance the system's usability to assign a detailedness of information (Nomoto, paragraph [0050] & [0051]).

Conclusion

The prior art made of record, listed on form PTO-892, and not relied upon, if any, is considered pertinent to applicant's disclosure.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to MD. I. UDDIN whose telephone number is (571)270-3559. The examiner can normally be reached on Monday to Friday 9.00 am to 5.00 pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, MAHMOUDI TONY can be reached on (571) 272-4078. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

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Examiner, Art Unit 2169, 04/08/2010   for Tony Mahmoudi, SPE of Art Unit
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